AMENDMENTS TO THE SPECIFICATION

Please replace paragraph 37 with the following rewritten paragraph:

-- [0037] The autonomous in-vivo device 200 may include a container or housing 201. Within the housing 201, may be, for example, an optical assembly 202, a power assembly ~~204~~ 224, a transceiver 206, one or more antenna(s) 208, one or more storage tanks 210A and 210B, a controller 212 and one or more extendable elements or proboscises 214A and 214B. However, some of the above elements or assemblies may be located partially or completely externally to the housing 201. --

Please replace paragraph 39 with the following rewritten paragraph:

-- [0039] The power assembly ~~204~~ 224 may include one or more batteries 224A and 224B. Batteries 224A and 224B may include, for example, silver oxide batteries, lithium batteries, or other electrochemical cells having a high energy density, rechargeable batteries, or the like, but may include other suitable elements. The batteries 224A and 224B may be operatively connected to one or more of the elements of the in-vivo device 200, such that the batteries 224A and 224B may be adapted to energize one or more of these elements. For example, the power assembly ~~204~~ 224 may be operatively connected to one or more of the illumination sources 218, the solid state imager 220, the proboscis 214A and 214B, the storage tanks 210A and 210B, the controller 212, the transceiver 206 and/or the antenna(s) 208. According to some embodiments of the present invention, an internal power source may be a device to receive power induced ~~201~~ from an external source. For example, power assembly ~~204~~ 224 may include a suitable power receiving unit, for receiving power from an external source. The power may be induced, for example, in the form of radio waves or magnetic waves, from a source located outside the patient's body (not shown) and a converter located within the housing 201, for example part of power assembly ~~204~~ 224, may be adapted receive the waves, convert them to energy and supply the energy to each of the one or more elements located inside the housing 201. The converter may be adapted to convert the energy to a suitable form, including but not limited to, electricity, magnetic field, electromagnetic radiation, chemical potential, or the like. According to another embodiment of the present invention, the housing 201 may be connected to an external energy source (not shown) using one or more wires (not

shown). The wires may be operatively connected to the housing 201 at one end, and to the external energy source at the other end. Alternatively, the wires may be operatively connected directly to each of the one or more elements of interest, located inside the housing 201. It may thus be possible to power one or more of the elements located inside the housing 201 using an external power source. --

Please replace paragraph 41 with the following rewritten paragraph:

-- [0041] Control of the device 200, including control of the proboscis 214A and 214B, may be similar to that described above, with Fig. 1A. The transceiver 206 may be operatively connected to one or more antenna(s) 208, which may include an antenna array. The transceiver 206 together with the antenna(s) 208 may be adapted to receive incoming communications from outside the body (e.g., control signals or movement signals), and to transmit outgoing communications from inside the housing 201 to a destination located outside the patient's body. Typically, such transmissions are performed using radio waves, although other transmission methods are possible. For example, wired transmission may be used. The controller 212 may be operatively connected to the transceiver 206 and to one or more of the proboscises 214A and 214B, illumination source 218, solid state imagers 220, optical elements 222, batteries ~~210A~~ 224A and ~~210B~~ 224B, antenna(s) 208 or any other elements within the housing 201. --

Please replace paragraph 42 with the following rewritten paragraph:

-- [0042] The controller 212 may include a processor (not shown), such as a microcontroller or a computer on a chip. The processor may input inbound signals received by the transceiver 206 and may process the inbound signal. The inbound signals may be, for example, control signals generated by a user externally, for controlling one or more aspects of the operation of the autonomous in-vivo device 200. Typically, the autonomous in-vivo device 200 may be suitable for a single use. The processor may also receive outbound signals (e.g. image signals from the solid state imager 220, power level of the batteries ~~210A~~ 224A and ~~210B~~ 224B, treatment parameters obtained by the proboscis 214A and 214B, etc.), process the outbound signals and output the processed outbound signal to the transceiver 206 for transmission outside of the patient's body. In alternate embodiments, different components or sets of components may be used. For example, the controller 212 may be part

of, combined with, or integrated within the transceiver 206 or a transmitter. Controller 212 may, for examples, send movement signals or control signals to an arm or extendible element such as proboscis 214. --

Please replace paragraph 46 with the following rewritten paragraph:

-- [0046] The device 200 may include, for example, one or more storage tanks 210A and 210B. The extendable elements or proboscises 214A and 214B may be operatively connected to, or may be able to manipulate storage tanks 210A and 210B or substances within storage tanks 210A and 210B. The storage tanks 210A and 210B may be adapted to store substances, liquids or gasses (e.g. adhesive substances, medication, water, in-vivo samples, etc.) to be applied to area inside a patient's body or collected from a patient. The substances, liquids or gasses stored in the storage tanks 210A and 210B may be applied to or onto an area inside the patient's body, for example through or by the proboscis ~~204A~~ <u>214A</u> and ~~204B~~ <u>214B</u>, which may be suitably configured with a channel or tube, or may be attached to or move a channel, tube, hose or lumen. The storage tanks 210A and 210B may also be adapted to store samples collected from within the patient's body (e.g. gas samples, blood samples, tissue samples, etc.). For example, one or more of the proboscis ~~204A~~ <u>214A</u> and ~~204B~~ <u>214B</u> may be adapted to collected gas samples, blood samples, tissue samples, or the like and the samples may be transferred to one or more of the storage tanks 210A and 210B, for storage. In such case, the proboscis ~~204A~~ <u>214A</u> and ~~204B~~ <u>214B</u> may be hollow, or may include a lumen, vias or tubes internally or externally. For example, a pump 270 (Fig. 1C) may be used to provide suction and transfer materials to a tank, and lumen 310 (Figs. 2A and 2B) may transport materials. According to an embodiment of the present invention, the stored samples may be analyzed within the housing 201 and the analyzed data may be transmitted outside the patient's body. The stored samples may also be retrieved and taken for analysis outside the patient's body. In an alternate embodiment, a lumen or channel need not be included, and the extendable elements may be substantially solid. --

Please replace paragraph 47 with the following rewritten paragraph:

-- [0047] Fig. 1C is a cutaway view of a device including one or more moveable elements, arms or proboscises and one or more storage tanks. For clarity, components of device 200 shown elsewhere are not shown in Fig. 1C. Referring to Fig. 1C, device 200

includes a proboscis ~~204~~ 214 which includes a typically internal channel, lumen or hose 205. One or more tanks 210a, 210b and 210c may provide or collect fluid or other substances (e.g., medicine, bodily fluid) via tubes or pipes 274 and pump 270. In various embodiments, pump 270 may be operated to empty or fill tank(s) 210, or to both empty and fill tank(s) 210, as the application requires. Valves 272a, 272b and 272c may be provided to open, close, and control the flow to/from, the tank(s) 210. Proboscis ~~204~~ 214 may be connected to, inter alia, the pump 270. Pump 270, valves 272a, 272b and 272c, and other components typically operate under the control of a controller such as controller 212 (Fig. 1B). --